iZotope Trash Distortion for Wwise

Introduction

The iZotope Trash Distortion effect for Wwise provides 47 different distortion types with the ability to chain two distortions together for powerful combinations. The individual controls of each distortion can also be tweaked to get a unique character for any sound. This effect is exactly what you need for adding realism to a radio transmission or a powerful punch to a car engine.
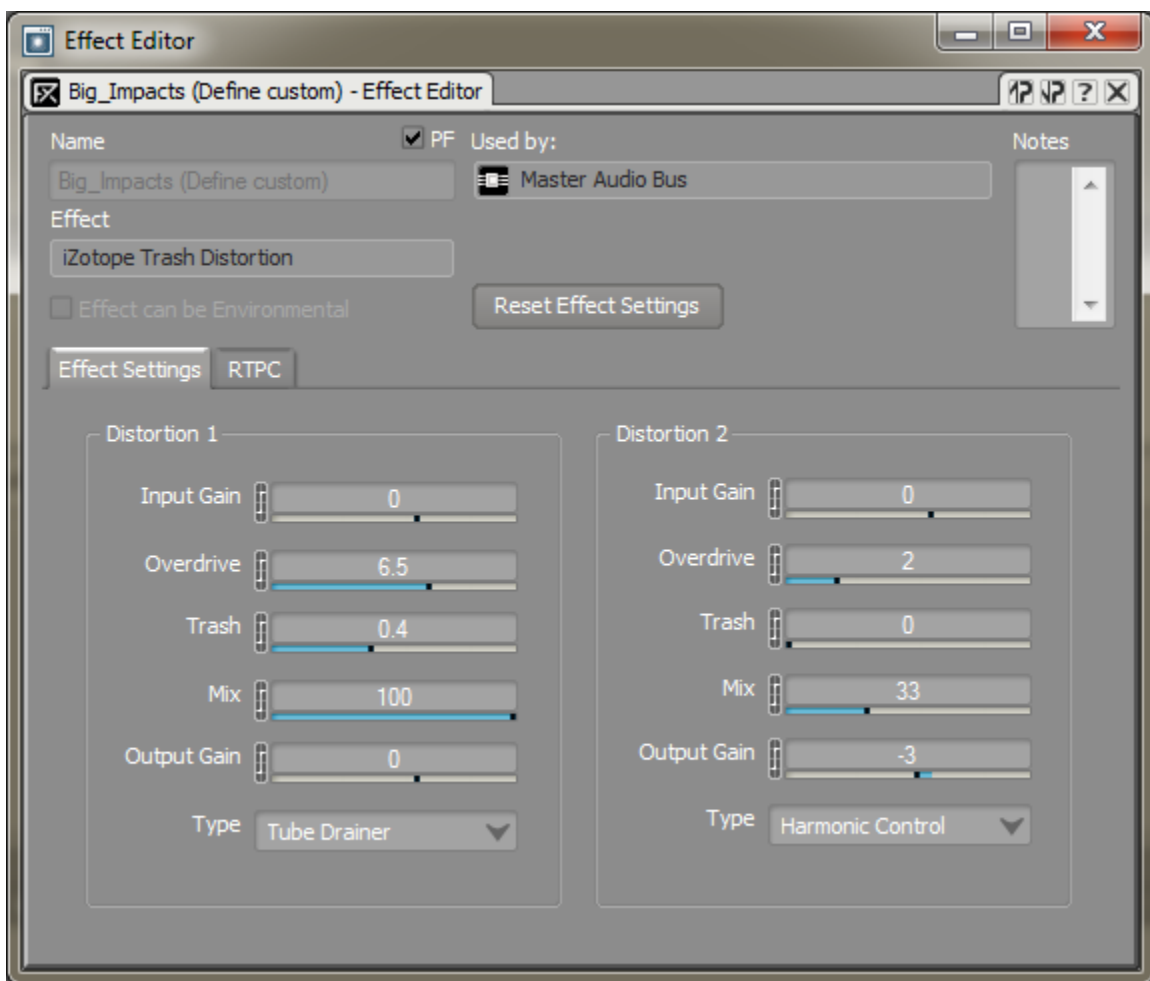

Figure 1 - iZotope Trash Distortion

Distortion

The main control for each of the Trash distortions is the *Overdrive* parameter, which controls the level of distortion. Additionally, some of the distortions can be further modified by the *Trash* slider, which will affect the overall character of the distortion sound.

For example, the "Bit Wrench" distortion is bit depth reducer, providing a lo-fi digital effect. When this distortion is selected, the *Trash* level is directly related to the bit depth of the audio, and gives a "crunchier" result as it is increased.
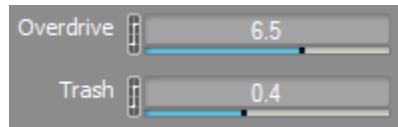

Figure 2 - Overdrive and Trash Controls

Dual Stage Distortion

In many "real life" situations, distortion is a combination of two or more effects. For example, a distortion stomp box might be driving the distortion in the preamp of an amplifier. Adding two stages of distortion is effective for creating complex yet natural sounding distortion, as the "dual stages" interact to drive each other and create complex harmonics.

The Trash Distortion effect allows two distortions to be chained together, each with its own set of controls. The output from the Distortion 1 section leads into the Distortion 2 section; the distorted audio from the first section is then affected by the settings of the second section. As an example, a Fuzz effect can be placed before an amplifier distortion.

Note that the *Output Gain* of Distortion 1 affects the input gain of Distortion 2. Since many distortions are gain dependent, Distortion 2 can become more or less distorted by adjusting the *Output Gain* of Distortion 1.

Interface Element	Description
Input Gain	Adjusts the Input Gain which can be used to normalize input levels. Default value: 0 Range: - 30 to 20 Units: dB
Overdrive	For most distortion types, this controls the amount of drive or distortion. Default value: 5 Range: 0 to 10 Units: None
Trash	Some distortion types can be use the "Trash" control to add extra character to the sound. Increasing the Trash value will generally "trash" or distort the sound more. Default value: 0.5 Range: 0 to 1 Units: None
Mix	Controls the Mix between the processed distorted signal (100%) and original unprocessed signal (0%). Default value: 100 Range: 0 to 100 Units: %
Output Gain	Controls the gain after distortion. For most distortions the output gain should be turned down as overdrive is turned up. Default value: 0 Range: - 30 to 20 Units: dB

Type	Selects the type of Distortion used in each of the two sections. The Distortion choices are:		
	None	Crungey Grunch	Mild Excitement
	Amp Drainer	Grungey Crunch	Garage Fuzz
	Amperical	Clip Control	Bit Wrench
	Distropia	Delicate	Cheap Digital
	Harmonic	Harmonics	Bit Aliasing
	Control	Squealer	Cracked Actor
	Mirror Overdrive	Hot Tin roof	Cracked Actress
	Smooth	Blues Driver	Rubber Hammer
	Overdrive	Double Stages	Faulty Transistor
	Straight Fuzz	Gentle Push	Bad Breakup
	Ten Inch Spike	Slight Twist	Citrus Pulp
	Tube Drainer	Cold Solder	Acid Fuzz
	Smooth Fuzz	Little Popper	Uncontrolled Static
	Nasty Boy	Radio Contact	Stomper
	Wrecktifier	Elastic Trash	Iron fuzz
	Hard Limits	Tape Saturation	Noise Art
	Positive Fuzz	Push Pull	
	Negative Fuzz		